

CLAIMS:

We claim:

- 1           1.       A method comprising:  
2           discovering a new unit deployed within a data center;  
3           finding a configuration template for the discovered unit; and  
4           automatically installing software on said discovered unit based upon said  
5           configuration template.
  
- 1           2.       A method according to claim 1 wherein discovering includes:  
2           determining whether said unit requires soft configuration; and  
3           if said unit requires soft configuration, then receiving a network request for  
4           configuration data from said unit.
  
- 1           3.       A method according to claim 2 wherein said discovering further includes:  
2           determining if the MAC (Media Access Control) address sent with said network  
3           request is of a known MAC.
  
- 1           4.       A method according to claim 3 wherein determining includes:  
2           extracting the MAC of the network device which originated said network request;  
3           comparing the determined MAC with a list of known MACs, said MAC being  
4           known if said determined MAC is also found in said list.
  
- 1           5.       A method according to claim 3 wherein if said MAC is known, then  
2           discovering further includes:  
3           finding an asset ID in an asset records database, said asset ID based upon said  
4           MAC.
  
- 1           6.       A method according to claim 5 further comprising:  
2           determining the state of said unit;  
3           if said state is one of initial and re-install, then proceeding with said finding of a  
4           configuration template; and

5 if said state is not one of initial and re-install then proceeding with the normal  
6 boot sequence of said unit.

1 7. A method according to claim 3 further comprising:  
2 if said determined MAC is not known, then proceeding with intruder diagnostics.

1 8. A method according to claim 1 further comprising:  
2 prior to a new unit being deployed, associating the unit with an asset record.

1 9. A method according to claim 8 wherein associating includes:  
2 creating said asset record with a specific asset ID, said asset ID tied to a fixed  
3 parameter of said unit;  
4 waiting for said unit to be received and prepared for assembly;  
5 correlating said received unit with said created asset record.

1 10. A method according to claim 9 wherein said correlating includes:  
2 reading bar-code information on components of said unit;  
3 determining which one of a plurality of asset records contains parameters that  
4 match said bar-code information; and  
5 associating said unit with said determined asset record, said determined asset  
6 record being the same as said created asset record for said unit.

1 11. A method according to claim 1 wherein said unit is mountable within a  
2 rack of said data center.

1 12. A method according to claim 9 wherein said fixed parameter is the MAC  
2 address of the primary Network Interface Card (NIC) of said unit.

1 13. A system comprising:  
2 a data center deployable unit (node) connectable to a network;  
3 a management system server configured to manage a database of asset records,  
4 one of said asset records corresponding to said node, said management system server

5 maintaining and updating state information about said node in its corresponding asset  
6 record, said management system server connected to said network; and  
7 a software configuration system server configured to automatically install  
8 software on said node once said node is deployed and connected to said network, said  
9 software configuration system server connected to said network.

1 14. A system according to claim 13 wherein said software configuration  
2 system is instructed on the manner and content of said installation by a software  
3 configuration template.

1 15. A system according to claim 13 further wherein said management system  
2 server is configured to:  
3 determine whether said node requires soft configuration; and  
4 if said node requires soft configuration, then receiving a network request from  
5 said node.

1 16. A system according to claim 15 wherein said management system server  
2 determines if the MAC of the network device which initiated said request is a known  
3 MAC, said network device a part of said node.

1 17. A system according to claim 13 wherein said node is a computer system  
2 mountable within a rack in said data center.

1 18. A system according to claim 16 wherein said network device is a Network  
2 Interface Card (NIC).

1 19. A system according to claim 14 wherein said management system server  
2 finds the asset ID corresponding to said node upon said node sending a network request  
3 message.

1           20.     A system according to claim 19 wherein said management system server is  
2 further configured to:  
3           determine the state of said unit;  
4           if said state is one of initial and re-install, then proceed with said finding of said  
5 configuration template; and  
6           if said state is not one of initial and re-install then allow said node to proceed with  
7 the normal boot sequence of said unit.

1           21.     A system according to claim 13 wherein said management system server is  
2 configured to associate said node with its said corresponding asset record.

1           22.     A system according to claim 21 wherein said management system sever is  
2 further configured to:  
3           create said asset record with a specific asset ID, said asset ID tied to a fixed  
4 parameter of said unit;  
5           wait for said unit to be received and prepared for assembly; and  
6           correlate said received unit with said created asset record.

1           23.     An article comprising a computer readable medium having instructions  
2 stored thereon which when executed cause:  
3           discovering a new unit deployed within a data center;  
4           finding a configuration template for the discovered unit; and  
5           automatically installing software on said discovered unit based upon said  
6 configuration template.

1           24.     An article according to claim 23 wherein discovering includes:  
2           determining whether said unit requires soft configuration; and  
3           if said unit requires soft configuration, then receiving a network request from said  
4 unit.

1           25.     An article according to claim 24 wherein said discovering further includes:  
2           determining if the MAC (Media Access Control) address sent with said network  
3     request is a known MAC.

1           26.     An article according to claim 25 wherein if said MAC is known, then  
2     discovering further includes:  
3           finding an asset ID in an asset records database, said asset ID based upon said  
4     MAC.

1           27.     An article according to claim 26 that further causes:  
2           determining the state of said unit;  
3           if said state is one of initial and re-install, then proceeding with said finding of a  
4     configuration template; and  
5           if said state is not one of initial and re-install then proceeding with the normal  
6     boot sequence of said unit.

1           28.     An article according to claim 23 that further causes:  
2           prior to a new unit being deployed, associating the unit with an asset record.

1           29.     An article according to claim 28 wherein associating includes:  
2           creating said asset record with a specific asset ID, said asset ID tied to a fixed  
3     parameter of said unit;  
4           waiting for said unit to be received and prepared for assembly;  
5           correlating said received unit with said created asset record.